AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-7. (Cancelled)

8. (Currently amended) A triethanolamine ~~Triethanolamine~~ having high thermal stability over time for avoiding or reducing coloration thereof, said triethanolamine (TEA) having:

i) a degree of purity equal to or greater than 99.2% by weight;

ii) a residual content of secondary dialkanolamine of less than 2000 ppm;

iii) a sulphuric ash content of less than 300 ppm, measured according to the V.3.2.14 Standard of the European Pharmacopoeia (1994 Edition); and

iv) a colour index of less than 120 Hazens, measured according to the ASTM D 1209 Standard, after the said TEA has undergone a hot-ageing test at 140°C in an inert atmosphere for a period of 4 hours.

9. (Previously presented) The triethanolamine of Claim 8, wherein:

i) the degree of purity is equal to or greater than 99.5% by weight;

ii) the residual content of secondary dialkanolamine is less than 1000 ppm;

iii) the sulphuric ash content is less than 100 ppm, and

iv) the colour index is less than 80 Hazens after the said TEA has undergone the hot-ageing test at 140°C in an inert atmosphere for a period of 4 hours.

10. (Previously presented) The triethanolamine of Claim 8, wherein:

i) the degree of purity is equal to or greater than 99.7% by weight;

ii) the residual content of secondary dialkanolamine is less than 500 ppm;

iii) the sulphuric ash content is less than 10 ppm; and

iv) the colour index is less than 40 Hazens after the said TEA has undergone the hot-ageing test at 140°C in an inert atmosphere for a period of 4 hours.

11. (New) A triethanolamine having high thermal stability over time for avoiding or reducing coloration thereof, said triethanolamine (TEA) having:

i) a degree of purity equal to or greater than 99.2% by weight;

ii) a residual content of secondary dialkanolamine of less than 2000 ppm;

iii) a sulphuric ash content of less than 300 ppm, measured according to the V.3.2.14 Standard of the European Pharmacopoeia (1994 Edition); and

iv) a colour index of less than 120 Hazens, measured according to the ASTM D 1209 Standard, after the said TEA has undergone a hot-ageing test at 140°C in an inert atmosphere for a period of 4 hours,

wherein said TEA is produced by, in succession, the steps of;

(a) synthesizing TEA by continuously bringing ammonia into contact with ethylene oxide, under conditions allowing the formation of a reaction mixture comprising mono- di- and tri-ethanolamines,

(b) continuously separating the ammonia that has not reacted from the reaction mixture;

(c) continuously separating the TEA from the mixture resulting from step (b) by separating the monoethanolamine and some of the diethanolamine from the mixture resulting from step (b), preparing or isolating a specific mixture of alkanolamines comprising TEA and from 0.5 to 50% by weight of at least one secondary dialkanolamine, and separating and isolating TEA with a degree of purity equal to or

greater than 99.2% by weight by continuous distillation of the specific mixture of alkanolamines.

12. (New) The triethanolamine of claim 11, wherein:

i) the degree of purity is equal to or greater than 99.5% by weight;

ii) the residual content of secondary dialkanolamine is less than 1000 ppm;

iii) the sulphuric ash content is less than 100 ppm, and

iv) the colour index is less than 80 Hazens after the said TEA has undergone the hot-ageing test at 140°C in an inert atmosphere for a period of 4 hours.

13. (New) The triethanolamine of claim 11, wherein:

i) the degree of purity is equal to or greater than 99.7% by weight;

ii) the residual content of secondary dialkanolamine is less than 500 ppm;

iii) the sulphuric ash content is less than 10 ppm; and

iv) the colour index is less than 40 Hazens after the said TEA has undergone the hot-ageing test at 140°C in an inert atmosphere for a period of 4 hours.

14. (New) The triethanolamine of claim 11, wherein the at least one secondary dialkanolamine is selected from the group consisting of diethanolamine, diisopropanolamine, di-n-propanolamine and di-n-butanolamine.

15. (New) The triethanolamine of claim 14, wherein the secondary dialkanolamine is diethanolamine.

16. (New) The triethanolamine of claim 11, wherein the TEA is separated and isolated by lateral withdrawal from a distillation column continuously fed with the specific mixture of alkanolamines.

17. (New) The triethanolamine of claim 11, wherein in step (c) the monoethanolamine and some of the diethanolamine from the mixture resulting from step (b) is separated by means of a prior distillation or at least two prior distillations of the mixture resulting from step (b) so as to provide the specific mixture of alkanolamines.

18. (New) The triethanolamine of claim 11, wherein in step (c) the monoethanolamine and some of the diethanolamine from the mixture resulting from step (b) is separated by means of a prior distillation or at least two prior distillations of the mixture resulting from step (b), and preparing the specific mixture of alkanolamines by adding to the mixture resulting from the prior distillation(s) a secondary dialkanolamine in an amount such that, in total, the proportion of secondary dialkanolamine corresponds to that required in the specific mixture of alkanolamines.

19. (New) The triethanolamine of claim 11, wherein the TEA is separated and isolated by a continuous distillation of the specific mixture of alkanolamines coming from the withdrawal from the bottom of a prior distillation column, where TEA having a degree of purity of less than 99% by weight is separated and isolated.

20. (New) A triethanolamine-based mixture having high thermal stability over time for avoiding or reducing coloration thereof comprising from 99.2 to 99.9% by weight of triethanolamine, from 2000 to 50 ppm of a secondary dialkanolamine and optionally from 500 to 10 ppm of monoethanolamine, said triethanolamine-based mixture having:

i) a sulphuric ash content of less than 300 ppm, measured according to the V.3.2.14 Standard of the European Pharmacopoeia (1994 Edition); and

ii) a colour index of from 0 to 120 Hazens, measured according to the ASTM D 1209 Standard, after the said triethanolamine-based mixture has undergone a hot-ageing test at 140°C in an inert atmosphere for a period of 4 hours.

21. (New) The triethanolamine-based mixture of claim 20 comprising from 99.5 to 99.9% by weight of triethanolamine, from 1000 to 50 ppm of a secondary dialkanolamine and optionally from 200 to 10 ppm of monoethanolamine, said triethanolamine-based mixture having:

i) a sulphuric ash content of less than 100 ppm, measured according to the V.3.2.14 Standard of the European Pharmacopoeia (1994 Edition); and

ii) a colour index of from 0 to 80 Hazens, measured according to the ASTM D 1209 Standard, after the said triethanolamine-based mixture has undergone a hot-ageing test at 140°C in an inert atmosphere for a period of 4 hours.

22. (New) The triethanolamine-based mixture of claim 20 comprising from 99.7 to 99.9% by weight of triethanolamine, from 500 to 50 ppm of a secondary dialkanolamine and optionally from 100 to 10 ppm of monoethanolamine, said triethanolamine-based mixture having:

i) a sulphuric ash content of less than 10 ppm, measured according to the V.3.2.14 Standard of the European Pharmacopoeia (1994 Edition); and

ii) a colour index of from 0 to 40 Hazens, measured according to the ASTM D 1209 Standard, after the said triethanolamine-based mixture has undergone a hot-ageing test at 140°C in an inert atmosphere for a period of 4 hours.

23. (New) The triethanolamine-based mixture of claim 20, wherein the secondary dialkanolamine is selected from the group consisting of diethanolamine, diisopropanolamine, di-n-propanolamine and di-n-butanolamine.

24. (New) The triethanolamine-based mixture of claim 20, wherein the secondary dialkanolamine is diethanolamine.